



ph: (307) 672-8945 1673 Terra Avenue, Sheridan, Wyoming 82801

Date: 8/17/2017

**Consolidated Analytical Systems CLIENT:** 

CASE NARRATIVE S.H. Bell-Chicago, IL Report ID: S1708125001

Lab Order: S1708125

Project:

Samples 527.174 S4HV2-072717-R, and 527.175 S4HV1-073017-R were received on August 4, 2017.

All samples were received and analyzed within the PA recommended holding times, except those noted below in this case narrative. Samples were analyzed using the methods outlined in the following references:

"Standard Methods For The Examination of Water and Wastewater", approved method versions Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition 40 CFR Parts 136 and 141 40 CFR Part 50, Appendices B, J, L, and O

Methods indicated in the Methods Update Rule published in the Federal Register Friday, May 18, 2012

ASTM approved and recognized standards

All Quality Control parameters met the acceptance of teria defined by EPA and Inter-Mountain Laboratores except as indicated in this case narrative.

Reviewed by:

John Jacobs, Project Manager





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# Sample Analysis Report

**CLIENT:** Consolidated Analytical Systems

201 S. Miami Ave Cleves, OH 45002 Date Reported: 8/17/2017

Report ID: S1708125001

Client Sample ID 527.175 S4HV1-073017-R

S.H. Bell-Chicago, IL Project:

Matrix: airfilter COC ID: WEB 10129 Collection Date: 7/30/2017

Date Received: 8/4/2017 10:30:00 AM Lab ID: S1708125-001

Work Order: S1708125

Result	RL	MDL	Qual	Units	Method	Date Analyzed/Init
1660				m³	Field	07/30/2017 000
2.57	5	0.628	J	μg/Filter	IO-3.5	08/11/2017 1342 MS
ND	5	0.19		μg/Filter	IO-3.5	08/11/2017 1342 MS
52	5	0.165		μg/Filter	10-3.5	08/11/2017 1342 MS
3.97	5	0.00999	J	μg/Filter	10-3.5	08/11/2017 1342 MS
64	5	0.0535		μg/Filter	10-3.5	08/11/2017 1342 MS
1.65	5	0.16	J	μg/Filter	10-3.5	08/11/2017 1342 MS
0.686	5	0.388	J	μg/Filter	10-3.5	08/11/2017 1342 MS
1.55	3.01	0.378	J	ng/m³	10-3.5	08/17/2017 1209 JJ
ND	3.01	0.114		ng/m³	10-3.5	08/17/2017 1209 JJ
31.2	3.01	0.0994		ng/m³	10-3.5	08/17/2017 1209 JJ
0.00239	0.00301	0.00000602	J	μg/m³	10-3.5	08/17/2017 1209 JJ
38.5	3.01	0.0322		ng/m³	10-3.5	08/17/2017 1209 JJ
0.991	3.01	0.0964	J	ng/m³	10-3.5	08/17/2017 1209 JJ
0.413	3.01	0.234	J	ng/m³	10-3.5	08/17/2017 1209 JJ
	1660  2.57  ND 52 3.97 64 1.65 0.686  1.55  ND 31.2 0.00239 38.5 0.991	1660  2.57	1660  2.57	1660  2.57	1660 m³  2.57 5 0.628 J μg/Filter ND 5 0.19 μg/Filter 52 5 0.165 μg/Filter 3.97 5 0.00999 J μg/Filter 64 5 0.0535 μg/Filter 1.65 5 0.16 J μg/Filter 0.686 5 0.388 J μg/Filter 1.55 3.01 0.378 J ng/m³ ND 3.01 0.114 ng/m³ 31.2 3.01 0.0994 ng/m³ 0.00239 0.00301 0.00000602 J μg/m³ 38.5 3.01 0.0322 ng/m³ 0.991 3.01 0.0964 J ng/m³	1660 m³ Field  2.57 5 0.628 J μg/Filter IO-3.5  ND 5 0.19 μg/Filter IO-3.5  52 5 0.165 μg/Filter IO-3.5  3.97 5 0.00999 J μg/Filter IO-3.5  64 5 0.0535 μg/Filter IO-3.5  1.65 5 0.16 J μg/Filter IO-3.5  0.686 5 0.388 J μg/Filter IO-3.5  1.55 3.01 0.378 J ng/m³ IO-3.5  ND 3.01 0.114 ng/m³ IO-3.5  31.2 3.01 0.0994 ng/m³ IO-3.5  0.00239 0.00301 0.00000602 J μg/m³ IO-3.5  0.00239 0.00301 0.00000602 J μg/m³ IO-3.5  38.5 3.01 0.0322 ng/m³ IO-3.5  0.991 3.01 0.0964 J ng/m³ IO-3.5

### These results apply only to the samples tested.

Qualifiers:

- Analyte detected in the associated Method Blank В
- Value above quantitation range
- Holding times for preparation or analysis exceeded Η
- Analyzed by another laboratory
- ND Not Detected at the Reporting Limit
- Spike Recovery outside accepted recovery limits

### **RL** - Reporting Limit

- Calculated Value
- Analyzed at IML Gillette laboratory
- Analyte detected below quantitation limits
- Value exceeds Monthly Ave or MCL or is less than LQ.
- Outside the Range of Dilutions
- Matrix Effect

Reviewed by:

John Jacobs, Project Manager



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# Sample Analysis Report

**CLIENT:** Consolidated Analytical Systems

201 S. Miami Ave Cleves, OH 45002 Date Reported: 8/17/2017

Report ID: S1708125001

Client Sample ID 527.174 S4HV2-072717-R

S.H. Bell-Chicago, IL Project:

Matrix: airfilter WEB 10129 COC ID:

Collection Date: 7/27/2017

Lab ID: S1708125-002 Work Order: S1708125

Date Received: 8/4/2017 10:30:00 AM

Analyses	Result	RL	MDL	Qual	Units	Method	Date Analyzed/Init
ield							
Actual Volume	1659				m³	Field	07/27/2017 000
O-3.5 TSP							
Arsenic	ND	5	0.628		μg/Filter	10-3.5	08/11/2017 1405 MS
Cadmium	ND	5	0.19		μg/Filter	10-3.5	08/11/2017 1405 MS
Chromium	ND	5	0.165		μg/Filter	10-3.5	08/11/2017 1405 MS
Lead	0.0200	5	0.00999	J	μg/Filter	10-3.5	08/11/2017 1405 MS
Manganese	ND	5	0.0535		μg/Filter	10-3.5	08/11/2017 1405 MS
Nickel	ND	5	0.16		μg/Filter	10-3.5	08/11/2017 1405 MS
Vanadium	ND	5	0.388		μg/Filter	10-3.5	08/11/2017 1405 MS
Filter Metals Concentration							
Arsenic	ND	3.01	0.379		ng/m³	IO-3.5	08/17/2017 1209 JJ
Cadmium	ND	3.01	0.115		ng/m³	10-3.5	08/17/2017 1209 JJ
Chromium	ND	3.01	0.0995		ng/m³	10-3.5	08/17/2017 1209 JJ
Lead	0.0000120	0.00301	0.00000602	J	μg/m³	10-3.5	08/17/2017 1209 JJ
Manganese	ND	3.01	0.0322		ng/m³	10-3.5	08/17/2017 1209 JJ
Nickel	ND	3.01	0.0964		ng/m³	10-3.5	08/17/2017 1209 JJ
Vanadium	ND	3.01	0.234		ng/m³	10-3.5	08/17/2017 1209 JJ

### These results apply only to the samples tested.

Qualifiers:

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Holding times for preparation or analysis exceeded
- Analyzed by another laboratory
- ND Not Detected at the Reporting Limit
- Spike Recovery outside accepted recovery limits

### **RL** - Reporting Limit

- Calculated Value
- Analyzed at IML Gillette laboratory
- Analyte detected below quantitation limits
- Value exceeds Monthly Ave or MCL or is less than LQ.
- Outside the Range of Dilutions
- Matrix Effect

Reviewed by:

John Jacobs, Project Manager

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NIER-MOUNTAIN LABS	Sheridan, WY and Gillette, WY		All shaded fields must be completed. This is a legal document, any misrepresentation may be construed as found.	be completed					Š	3
Client Name				S. S. S.		ure/Att	estation of	Samples (Signature / Attestation of Authenticity)	Telephone #	
Consolidated Analytical Systems (CAS	d Systems (CAS)	S.H. Bell - Chicago, IL		1	1				513-542-1200	
Report Address	The second of th	Contact Name				AN.	NALYS ES	Y PARAMETERS		
201 S. Miami Avenue Cleves OH 45002		Meredith Cloran	in h h T T T		ic A	is rs	air			2000/2000/2000 balance
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201 S. Miami Avenue		Purchase Order #		Quote #	avir	air	tals			
Cleves, OH 45002		17-2507	8	O AS 17022231	Gra	for	Me		RES	REMARKS
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E (Lab Use Only)	SAMPLED	DEVIECTOR		Matrix Containers		10-	10-			
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LAB COMMENTS	Roll Roll	Relinquished By (Signature/Printed)		DATE TIME		70	eceived B	Received By (Signature/Printed)	DATE	TIME
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SHIPPING INFO	MATRIX CODES	TURN AROUND TIMES	D TIMES	COMPLIANCE INFO	m Z		RIMATION	Appir	ADDITIONAL REMARKS	
				Compliance Monitoring?	Suinc		K	Collected:		
	S S S	☐ RUSH - 5 Working Days		Program (SDWA, NPDES	NPDE	S)	CAA 1146	Giffor identification/mm/day)	Months of Consumptions	
		D URGENT - < 2 Working Days		Chlorinated?			z	84HV1-073017-R		
I Sher	Officer OT	Rush & Urgent Surcharges will be applied		Sample Disposal:	Lab	×	Client	S4HV2-072717-R		



Survey Meter # Model 2241-2; SN 182115

pH strip lot # HC547+

Thermometer SN# 27130475

# Condition Upon Receipt (Attach to COC)

Sa	mple Receipt					
1	Number of ice chests/p	packages received: " if samples are received over th	ROI1 e counter, unpackaged	? Yes	(No)	
	Temps Observed (°C): Temps Corrected (°C): Acceptable is - 0.1° to 10°		r-most other-water-parar	meters. Samples m		
	_					
^	***************************************	tact for temperatures out				N/A
		les for radiochemical analy cable): W(ほん	6129	Yes	No	(WA)
	COC Number (If applic		AND STATE OF THE S	V	No	N/A
		es agree with the COC?	- forter win i	(Yes )	No	N/A
	*	eived intact? (no broken bottle	s, ieaks, etc.)	(Yes	No	NA
	Were the sample custo	*	40	Yes		(VA)
		ompleted, legible, and signe	3G ?	Yes	No	
	mple Verification, Lab		into		No	
	•	alyses understood and app	*	Yes	No	
		orrespond with the COC info		Yes	No	
	•	nethod-prescribed containe	187	Yes	NO	
4	Sample Preservation:	Final pld (if added in Joh):	Preservati	voll ot#		Date/Time Added:
	pH at Receipt:	Final pH (if added in lab):				Date/ Illie Audeu.
	Total Metals	Total Meta				
	Diss Metals	Diss Meta	•	reserved in metals		Filtered and preserved in metals
	Nutrient	Nutrient Nutrient	H₂SO₄	anne ann an		
	Cyanide	Cyanide	NaOH			
	Sulfide	Sulfide	ZnAcet			
	Phenol	Phenol	H <sub>2</sub> SO <sub>4</sub>			
5	VOA vials have <6mm	headspace?		Yes	No	NA
6	Were all analyses with	in holding time at the time	of receipt?	Yes	No	And the second and th
7	Specially requested de	etection limits (RLs) assigne	∍d?	Yes	No	WAD
8	Have rush or project d	ue dates been checked an	d accepted?	Yes	No	NA
9	Do samples require su	ibcontracted analyses?		Yes	(No)	The state of the s
	If "Yes", which type of	subcontracting is required:	General	Customer-	Speçified	Certified
Sa	imple Receipt, Verificat	ion, Login, Labeling & Distr	ibution completed b	oy (initials):	XB Set ID:	51709125
n	screnancy Documents	ation (use back of sheet f	or notes on discre	epancies)		
Acceptation	4	with a response of "No" o	da mat waart and	. aidia adia na mar	ist be reso	olved.
a-1	Person Contacted:		Meth	od of Contact:	Phone:	JIVEG,
		Date/Time:	encontraction of the second of		Email:	
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